The only official copy of this file is the one on-line in the NSLS Quality Assurance website. Before using a printed copy, verify that it is the most

	on by checking the document effect National Laboratory	ive date on the NSL	S QA website. Number:	Revision:				
	nchrotron Light Source		LS-PPS-0020	B				
National Syl	icin ou on Light Bource		Effective:	Page 1 of 5				
			05/9/02	rage 1 of 3				
Subject: X-5A Target Area R	adiological Interlock Tes	st						
Prepared/ M. Buckley	Approved By: S. Buda	ı						
Approved By:								
			*Approval signature on	file with master copy				
Test Date:		Test Result:	□ Passed	□ Failed				
Test Reason:		Test Type:	□ Full	□ Partial				
		Start Time:	Finish	n Time:				
Tester 1:		Assistant 1:						
Tester 2:		Assistant 2:						
PREPARATION:			D /	mania dia mangangan				
Inform control room operator t	hat test will be done		<u>Kevision/</u>	Periodic Review Log				
LOTO lockout switch on x-ray				-				
Request X5 personnel install b	e	to satisfy user	interlock					
Verify that vacuum valves and		-						
Obtain spare Kirk key #16346			ii iiiic.					
Secure laser hutch.	for use in fortup door fock	in step 13.						
1. Search the Target Area		1						
	The red rotating			··				
	i ne audibie aiai	m sounds for i	13-15 seconds mir	ıımum				
2. Open hutch door								
2. open naten acer	ock sign goes o	out						
		2 2						
3. Press second check station (· · · · · · · · · · · · · · · · · · ·							
P 24 - 1 - 1	Pilot light does	not stay on						
Exit hutch, close door,		at activate						
Press CS-1, and CS-E.	Interlock does not activate							
Fless CS-1, and CS-E.	Interlock does n	ot activate						
	microck does n	ot activate						
4. Wait for rotating beacon to s	stop. Press CS-1, CS-2. C	lose Target Ar	ea door and wait.					
			e than 2 min after					
	starting.	•						
Press CS-E.	-							
	Interlock does n	Interlock does not activate						
5. Press interior search buttons	in order, close door, press	CS-E, note the	at alarm comes or	ı, open				
and close door, press CS-E aga								
in step 4)	•							

Interlock does not activate

	<u>y</u>	K-5A Target	Area Radiolo	ogical In	terlock '	Test		
Number:	LS-PPS-0020	Revision:	В Е	ffective:	5/9/02		Page 2 o	f 5
	n target area; one pe erson inside presses	The the Emergency S The t	e Safety Shutt end of the wa	arning in n. ble" ligh r comes (terval t goes ou	t		
	The Es	tur er four Emerg S indicator co	ned gency Stop bu	ittons	ES#2	ES#3	_ES#4	ES#5 (Loft)
Place sw safety sh	latch device on Fan itch holders on door utter.	r switches. S	•			put door ke	ey in SRU, oj	FAN LOFT
I	Replace holder on se	witch 2.	RIB latch ligh			R key is turn	ned.	DOOR
)]]]	Safety shutter RIA latch ligh Target area in Red "door" lig RIA cannot be	nt comes terlock d ght on sh	rops utter con	trol panel c	omes on	
	Replace holder on s]	Red door ligh Red door ligh ''Upstairs secu	t goes ou	it only af	ter complet	ing search	
area and	ove holders from the open and close the och	door. Both doo	nd latch devicor switches op or is opened.					

	2	X-5A Target A	rea Radio	ological Ir	terlock Tes	t		
Number:	LS-PPS-0020	Revision:	В	Effective:	5/9/02		Page 3 of	5
personne	<u>Door B</u> - Po <u>Door C</u> - R	ch holders on f ntrance from co ersonnel door in ollup door	Collowing counting room	loors:	Unlock targ	get area, roll	up, and	
,	Search Target Area.	Open safety s Beam ON		ON			_	
							Door	
	Remove holder from Replace holder on s	RIB latch	_		R key is	<u>A</u>	<u>B</u>	С
]	Remove holder from Replace holder on s Search area, and op	n switch 1 RIA latch Safety Sho Target Are Beam ON RIA canno witch 1.	utter closes ea interloc sign goes ot be reset	s k drops out w/o SOR	key			
	Replace hol	lder, reset RIA,						
Door 'A'	ove switch holders . Open and close death door and return keep	oors and check					each door.	
							B	C
13. Searc	ch Target Area, leav		ea Kirk Ke		cannot be rei	moved from	SRU	
14. Oper	n the safety shutter.	KKH canı	not be rem	oved even	if button is J	oushed		
Open	e shutters. "Cheat" shutter, remove KF		e. ght comes og ght comes o	on on				

		<u> </u>	K-5A Target A	Area Rac	diological In	terlock Test	
Beam line transfer key can be removed only if button on SRU is pushed Open safety shutter. Beam line transfer key can't be removed even if button is pushed Close safety shutter. "Cheat" KKBL SRU so key can be removed. Open safety shutter, remove key, and replace. RIA latch light comes on RIB latch light comes on The safety shutter closes SPA comes on SPA cannot be reset w/o SOR Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	Number:				_		Page 4 of 5
Beam line transfer key can be removed only if button on SRU is pushed Open safety shutter. Beam line transfer key can't be removed even if button is pushed Close safety shutter. "Cheat" KKBL SRU so key can be removed. Open safety shutter, remove key, and replace. RIA latch light comes on RIB latch light comes on The safety shutter closes SPA comes on SPA cannot be reset w/o SOR Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened							
Deen safety shutter. Beam line transfer key can't be removed even if button is pushed Close safety shutter. "Cheat" KKBL SRU so key can be removed. Open safety shutter, remove key, and replace. RIA latch light comes on RIB latch light comes on The safety shutter closes SPA comes on SPA cannot be reset w/o SOR Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch light comes on RIB latch comes on RIB latch comes on RIB latch light comes on RIB lat	16. Searc	ch Target Area and				1 1 '01	" CDII.
Open safety shutter. Beam line transfer key can't be removed even if button is pushed Close safety shutter. "Cheat" KKBL SRU so key can be removed. Open safety shutter, remove key, and replace. RIA latch light comes on RIB latch light comes on The safety shutter closes SPA comes on SPA cannot be reset w/o SOR Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened				anster ke	ey can be rem	loved only if bi	utton on SRU 18
Close safety shutter. "Cheat" KKBL SRU so key can be removed. Open safety shutter, remove key, and replace. RIA latch light comes on RIB latch light comes on The safety shutter closes SPA comes on SPA cannot be reset w/o SOR Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch tomes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	Onen	cafaty chuttar	pusned				
Close safety shutter. "Cheat" KKBL SRU so key can be removed. Open safety shutter, remove key, and replace. RIA latch light comes on RIB latch light comes on The safety shutter closes SPA comes on SPA cannot be reset w/o SOR Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The safety shutter closes RIA latch light comes on The safety shutter closes RIA latch light comes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	Open		line transfer k	ev can't l	ne removed e	ven if button is	spushed
Open safety shutter, remove key, and replace. RIA latch light comes on RIB latch light comes on The safety shutter closes SPA comes on SPA cannot be reset w/o SOR Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened		Deam	undibied K	- J - can t t		. 511 11 0411011 10	
RIA latch light comes on RIB latch light comes on The safety shutter closes SPA comes on SPA cannot be reset w/o SOR Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	Close	safety shutter. "Ch	eat" KKBL SI	RU so ke	y can be remo	oved.	
RIB latch light comes on The safety shutter closes SPA comes on SPA comes on SPA cannot be reset w/o SOR Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	Open	safety shutter, remo	-	-			
The safety shutter closes SPA comes on SPA cannot be reset w/o SOR Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened				-			
SPA comes on SPA cannot be reset w/o SOR Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened				-			
Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened			•		oses		
Reset RIA and RIB. 17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened					/ COD		
17. Open safety shutter and press an emergency stop button. RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	D 1	DIA and DID	SPA cannot	be reset	w/o SOR		
RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	Keset	KIA and KIB.					
RIA latch light comes on RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	17. Oper	n safety shutter and	press an emer	gency sto	p button.		
RIB latch light comes on Area interlock drops out Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened							
Reset RIA, RIB, and ES. 18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened							
18. Search Target Area. Open Shutter. Disconnect cable connector from upstream end of beam pipe across aisle. RIA latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened			Area interlo	ck drops	out		
RIA latch comes on RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	Reset	RIA, RIB, and ES.					
RIB latch comes on The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened			en Shutter. D	isconnect	t cable conne	ctor from upstr	ream end of beam pipe
The safety shutter closes Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened			RIA latch co	omes on			
Reset RIA and RIB. Open shutter. Disconnect cable at downstream end of pipe. RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened			RIB latch co	omes on			
RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened			The safety s	hutter clo	oses		
RIA latch comes on RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	1	Reset RIA and RIR	Onen shutter	Discon	mect cable at	downstream e	nd of nine
RIB latch comes on The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	J	Reset Rir I and RID.			moet caute at	ao wiisii caiii Ci	iiu oi pipo.
The safety shutter closes Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened							
Replace cable connector. 19. Open the safety shutter. Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened					oses		
Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened]	Replace cable conne	-				
Remove the Control Room Shutter Enable Key for X-5A, and then replace the key. The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	10 Oper	the cafety chutter					
The safety shutter closes RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened			m Shutter Ena	ible Kev	for X-5A and	d then replace t	the kev
RIA latch light comes on The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened	Kenne	, to the Control Roo				a mon replace	uic noy.
The "Control Room Disable light goes on The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened			-				
The SPA latch comes ON (After the key is turned back to enable) The shutter cannot be opened				-		goes on	
The shutter cannot be opened					_	-	ck to enable)
*						,	,
	Reset	RIA and SPA			•		

X-5A Target Area Radiological Interlock Test							
Number:	LS-PPS-0020	Revision:	В	Effective:	5/9/02	Pa	ge 5 of 5
At th	"Auto Open" key to e Control Room Ope to "Enable".	•	ole, switch	h the shutter	master enabl	le switch to "I	nhibit" and
Turn '	'Auto Open" to "OF	F". Cycle sho The safety si And does no	hutter clo	ses	ain.		
SR100. Open the	safety shutter.	door switch n RIB latch RIBX "Lo	umber 2. light con oop Enab	nes on led" indicato	or goes out	RIAX and RI	BX at
	Replace switch holde Reset RIB		not be re	set	or comes on		
	ove holder from doo	or switch 1. RIA latch RIAX "Lo RIAX "Lo The safety RIAX car	light con cop Enab cop Disab y shutter of nnot be res	nes on led" indicate bled" indicate closes set	or goes out or comes on		
inside the '24. Search associated	re the holders from satisfactors from satisfactors. Target Area and open the Target Area. On with X-5A by tracing chanism. Open and	switches on D en and close the Both door when door one person goon ing the beam p close the shu The corre	oor 'A'. ne door. r switches r is opene es into the ipe throu tter sever ct shutter shutter at	s operate free ed ex-ray tunne gh the shield al times. opens that sawtook	ely and each	makes a "click the safety shu ot rely on labe	c"
25. Returr	the spare Kirk key	#16346 to the	e spares c	abinet			
	re interlock test jump		•		applicable).		